

**REMARKS**

This is in response to the Office Action of May 3, 2002. A two-month Petition for Extension of Time is submitted herewith, making this response due on October 3, 2002.

Upon entry of the amendment, claims 1 and 3-20 are all the claims pending in the application.

Claim 2 is canceled.

Claim 1 is amended to replace "a compound represented by the following general formula (1)" with at least one of a compound represented by the formula (6) or the formula (7). The compounds represented by general formula (6) and general formula (7) correspond to compounds included within the range of the compounds represented by general formula (1) and general formula (2) and having further limitations to the structures thereof. Support in the specification for the compounds represented by formula (6) includes exemplary compound 7 used in Example 4; exemplary compound 9 used in Example 5; exemplary compound 30 used in Examples 7, 19 and 20; exemplary compound 35 used in Example 12; and exemplary compound 23 used in Example 14. Specific examples of the compounds represented by formula (7) include exemplary compound 62 used in Example 33. No new matter is added.

Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claim 2 is canceled.

Claims 1-2 and 9-10 are rejected under 35 U.S.C. 112, first and second paragraphs, as containing subject matter which is not enabled by the disclosure and subject matter which is indefinite.

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Claim 1 as amended is clear, definite and enabled. The term specifying that Z1 and Z2 "each independently" represent certain substituents has been deleted, along with the rest of the claim language referring to general formula (1). Therefore, Applicants respectfully request that this rejection be reconsidered and withdrawn.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,965,324 ("Okubo") with U.S. Patent 5,858,617 ("Nakayama") cited to show inherent properties.

However, Okubo does not disclose the photopolymerizable composition of amended claim 1 having at least one compound of formula (6) or formula (7). Nor does Okubo suggest a composition containing these compounds. The compounds represented by general formula (6) and general formula (7) are characterized in that, since these compounds have abnormally high light sensitivity and clarity, stain from dyes and background fogging of the recording material is substantially reduced. One of ordinary skill would not have known to select these specific compounds based on the disclosure of Okubo. Therefore, it is respectfully requested that this rejection be reconsidered and withdrawn.

Claims 1-2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,011,180 ("Cunningham") in view of Okubo. As stated in the preceding paragraph, the prior art does not disclose a photopolymerizable composition containing a compound represented by either formula (6) or formula (7). Nor is the composition of amended claim 1 suggested. The composition resulting from the inclusion of the compounds recited in amended claim 1 results in a superior photopolymerizable composition in terms of better resistance to

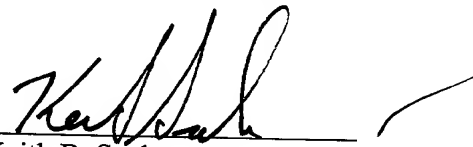
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fogging and stain. One of ordinary skill upon reading the cited prior art references would not have been led to the composition of Applicants' claim 1. Therefore, it is respectfully requested that the rejection be reconsidered and withdrawn.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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Date: October 3, 2002

**APPENDIX**  
**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

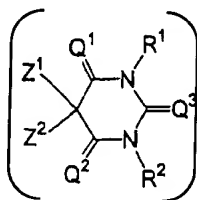
**IN THE CLAIMS:**

**Claim 2 is canceled.**

**Claim 1 is amended as follows:**

1. (Amended) A photopolymerizable composition comprising:  
a polymerizable compound having an ethylenically unsaturated bond[.];  
[a compound represented by the following general formula (1), and an organoboron  
compound represented by the following formula (A):

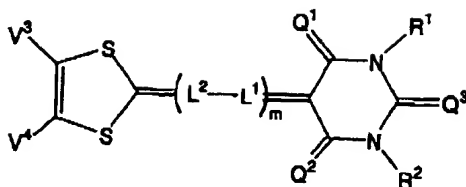
General formula (1)]



[wherein Q<sup>1</sup> to Q<sup>3</sup> each independently represents an oxygen atom or a sulfur atom; R<sup>1</sup> and R<sup>2</sup> each independently represents a hydrogen atom, an aliphatic group, an aromatic group, or a heterocyclic group; and Z<sup>1</sup> and Z<sup>2</sup> each independently represents a substituent necessary for the compound represented by the general formula (1) to become a dye;]

at least one of a compound represented by either formula (6):

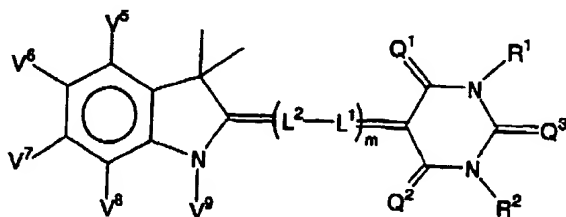
Formula (6)



wherein Q<sup>1</sup> and Q<sup>2</sup> each represents an oxygen atom, Q<sup>3</sup> represents an oxygen atom or a sulfur atom; R<sup>1</sup> and R<sup>2</sup> each independently represents a hydrogen atom, an aliphatic group, an aromatic group, or a heterocyclic group; L<sup>1</sup> and L<sup>2</sup> each independently represents a methine group which may be substituted; m represents an integer of 0 to 3; V<sup>3</sup> and V<sup>4</sup> each independently represents a hydrogen atom or a monovalent substituent;

or a compound represented by the following formula (7):

Formula (7)

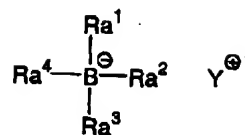


wherein Q<sup>1</sup> and Q<sup>2</sup> each represents an oxygen atom, Q<sup>3</sup> represents an oxygen atom or a sulfur atom; R<sup>1</sup> and R<sup>2</sup> each independently represents a hydrogen atom, an aliphatic group, an aromatic group, or a heterocyclic group; L<sup>1</sup> and L<sup>2</sup> each independently represents a methine group which may be substituted; m represents an integer of 0 to 3; V<sup>5</sup> to V<sup>9</sup> each independently represents a hydrogen atom or a monovalent substituent;

and an organoboron compound represented by the following formula (A):

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[General formula] Formula (A)



wherein  $\text{Ra}^1$ ,  $\text{Ra}^2$  and  $\text{Ra}^3$  each independently represents an aliphatic group, an aromatic group, a heterocyclic group, or  $-\text{SiR}_a^5\text{R}_a^6\text{R}_a^7$  where  $\text{Ra}^5$ ,  $\text{Ra}^6$ , and  $\text{Ra}^7$  each independently represents an aliphatic group or an aromatic group;  $\text{Ra}^4$  represents an aliphatic group; and  $\text{Y}^+$  represents a group capable of forming a cation.